

## **Product Evaluation**

RC444| 0715

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** RC-444 **Effective Date:** July 1, 2015

**Re-evaluation Date:** July 2019

**Product Name:** 24-gauge Central Snap Standing Seam Metal Roofing Panel Installed Over a Plywood

Deck

Manufacturer: Central States Manufacturing

302 Jane Place Lowell, AR 72745 (800) 356-2733

## **General Description:**

• The Central Snap standing seam steel roofing panel is a minimum 24-gauge steel panel that has a coverage width of 18". The metal roofing panels have a 1-3/4" rib height. The metal roofing panel has a yield strength of 50,000 psi.

## **Limitations:**

- **Roof Framing:** Install the metal roofing panels over a minimum 15/32" plywood deck as specified in Table 1.
- **New Roof Framing Attachment:** The roof framing must meet or exceed the uplift requirements of the IRC and IBC. Install the decking in a manner to resist lateral loads.
- **Design Wind Pressures:** Table 1 specifies installations to minimum 15/32" plywood deck and design wind pressure limitations.
- Installation Over an Existing Roof Covering: If installing over an existing roof covering, limit to a maximum of one existing layer of composition shingles, wood shingles or shakes, built-up roofing, or roll roofing applied over an existing, solid roof deck of minimum 15/32" plywood. Note: Inspect the existing roof deck prior to the installation of the roof panels. The existing roof deck's condition must be acceptable to receive the metal roofing panels before installing the metal roofing panel. Installation does not require Underlayment.

• **Roof Slope:** The metal roofing panels may be installed on roofs with a roof slope as low as 1/4:12.

**Table 1.** Attachment of Minimum 24-Gauge Central Snap Metal Roof Panels to Minimum 15/32" Plywood Deck

Design Wind Pressure (psf)	Panel Clip	Panel Clip Fastener	Panel Clip Spacing
-45.00	18-Gauge CSLCLP	Two (2), No. 10 x 1-1/2" PH screws	36" on center
-67.50	18-Gauge CSLCLP	Two (2), No. 10 x 1-1/2" PH screws	24" on center

## **Installation:**

- **General:** Install the steel roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.
- Roof Deck: Minimum 15/32" plywood deck.
- Underlayment: Use a minimum of one layer of No. 30 (Type II) asphalt felt. Use underlayment
  that complies with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970.
  Install the underlayment with 4" side laps and 6" end laps. Apply the underlayment with
  corrosion resistant fasteners in accordance with the manufacturer's installation instructions and
  the IRC or the IBC.
- Anchorage of Metal Panels to the Roof Deck: Secure the metal roofing panels to the plywood deck with CSLCLP UL90 18-gauge galvanized steel clips (3.50" width by 1.827" high). The clips are secured to the plywood deck with two (2) No. 10 x 1-1/2" long Pancake Head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck.
- Panel Side Laps: Panels to be snapped into place over each clip location.
- Panel Edges to the Roof Deck: Secure the metal roofing panels to the plywood deck with CSLCLP UL90 18-gauge galvanized steel clips (3.50" width by 1.827" high). The clips are secured to the plywood deck with two (2) No. 10 x 1-1/2" long Pancake Head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck.
- **Trims, Closures, and Accessories:** Install components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as required by the manufacturer.
- Panel Ends and End Laps: As required by the manufacturer.

**Note:** Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.